

**DET 80 Course Outline as of Spring 2002****CATALOG INFORMATION**

Dept and Nbr: DET 80 Title: DIESEL SHOP PRACTICES

Full Title: Diesel Shop Practices

Last Reviewed: 1/22/2018

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	3.00	Lecture Scheduled	2.00	17.5	Lecture Scheduled	35.00
Minimum	3.00	Lab Scheduled	2.25	8	Lab Scheduled	39.38
		Contact DHR	0		Contact DHR	0
		Contact Total	4.25		Contact Total	74.38
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 70.00

Total Student Learning Hours: 144.38

Title 5 Category: AA Degree Applicable

Grading: Grade Only

Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP

Also Listed As:

Formerly: DET 60

**Catalog Description:**

Diesel shop practices, including career information, safety procedures, tool and equipment use. Includes a discussion of workplace environment and labor/management issues, shop expectations, practices and routines.

**Prerequisites/Corequisites:****Recommended Preparation:****Limits on Enrollment:****Schedule of Classes Information:**

Description: Diesel shop practices, including career information, safety procedures, tool and equipment use. Includes a discussion of workplace environment and labor/management issues, shop expectations, practices and routines. (Grade Only)

Prerequisites/Corequisites:

Recommended:

Limits on Enrollment:

Transfer Credit: CSU;  
Repeatability: Two Repeats if Grade was D, F, NC, or NP

## **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

<b>AS Degree:</b>	<b>Area</b>			Effective:	Inactive:
<b>CSU GE:</b>	<b>Transfer Area</b>			Effective:	Inactive:
<b>IGETC:</b>	<b>Transfer Area</b>			Effective:	Inactive:
<b>CSU Transfer:</b>	Transferable	Effective:	Fall 2000	Inactive:	Fall 2014
<b>UC Transfer:</b>		Effective:		Inactive:	

### **CID:**

**Certificate/Major Applicable:**  
Certificate Applicable Course

## **COURSE CONTENT**

### **Outcomes and Objectives:**

Upon successful completion of this course, the student will be able to:

1. Categorize and evaluate the occupations for which students will be prepared.
2. Analyze labor / management issues in the workplace.
3. Summarize general and specific industrial shop safety standards and practices and demonstrate their appropriate application in a shop setting.
4. Discuss occupational survival skills for the industrial shop setting and practice team building skills.
5. Determine and describe the appropriate use and maintenance of hand, shop, and precision tools and demonstrate the same in a shop setting.
6. Describe and demonstrate the safe use of forklifts, overhead cranes, and other material handling equipment.
7. Correctly identify and use fasteners and mechanical fitting devices and determine appropriate use for each.

[Outcomes and objectives meet or exceed NATEF Applied Academic & Workplace Skills for Medium/Heavy Truck Technicians (Ref. Standard 6.5, ASE Program Certification Standards Manual, 1998.)]

Describe the values, themes, methods, and history of diesel equipment technology.

### **Topics and Scope:**

- I. Career Information
  - a. Categories of industrial occupations
  - b. Wages, salaries, benefits
  - c. Local and regional opportunities
  - d. Labor / management issues
  - e. Shop expectations, practices, and routines

- II. Shop safety standards and practices
    - a. Fire and disaster procedures
    - b. Cleanliness and order in the workplace
    - c. Tool and equipment organization and handling
    - d. Fire and emergency prevention and intervention practices
    - e. Proper lifting procedures
    - f. Personal safety practices
    - g. Environmental health and safety compliance
  - III. Use and maintenance of hand, shop and precision tools
    - a. Precision measuring tools
    - b. Hand and shop tools
    - c. Tool and equipment maintenance
  - IV. Fasteners and mechanical fitting devices
    - a. Appropriate fastener use
    - b. Fastening techniques
    - c. Fitting application
    - d. General torque specifications
  - V. Material handling equipment
    - a. Lifting and carrying devices
    - b. Overhead lifting equipment
    - c. Material hauling and transferring
  - VI. Workplace environment
    - a. Labor / Management issues
    - b. Shop expectations, practices, and routines
    - c. Work ethics
- Orientation to the values, themes, methods and history of diesel equipment technology.

**Assignment:**

1. Classroom discussion and role playing activities related to labor / management issues and occupational survival skills.
2. Readings and written exercises.
3. Lab assignments and worksheets.
4. Conduct research on government and industry safety standards.
5. Research a variety of related occupational areas.
6. Practice safe work habits while in the lab.
7. Practice safe and efficient tool use and maintenance.

**Methods of Evaluation/Basis of Grade:**

**Writing:** Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

Written homework, Lab reports
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Writing 10 - 20%
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**Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Homework problems, Quizzes

Problem solving  
15 - 20%

**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Class performances, Performance exams

Skill Demonstrations  
20 - 40%

**Exams:** All forms of formal testing, other than skill performance exams.

Multiple choice, True/false, Matching items, Completion

Exams  
20 - 40%

**Other:** Includes any assessment tools that do not logically fit into the above categories.

Attendance and participation.

Other Category  
10 - 20%

**Representative Textbooks and Materials:**

Diesel Technology Safety Skills, Student Edition, MAVCC, Inc., 1996.  
Diesel Technology Instruction, MAVCC, Inc. 1st ed., 1997.  
Instructor and industry handouts.